July 14: Doximity Dialer Video and Genetic Sequencing of SARS-CoV-2

This twice-weekly communication is intended to facilitate the sharing of important clinical information about the COVID-19 pandemic and reactivation initiatives across Northwestern Medicine.

In today's issue, you will learn about how to conduct video visits on a desktop computer using Doximity Dialer Video. Also, Infectious Disease Specialist Egon A. Ozer, MD, PhD, provides information about genetic sequencing of SARS-CoV-2 to characterize how COVID-19 is spreading.

DESKTOP VERSION OF DOXIMITY DIALER VIDEO

All Doximity users can now access the Dialer Video application using a desktop computer. Visit **doximity.com** from an NM or personal computer, log in to your Doximity account and click the Dialer Video tab to initiate a video call. Enter a patient's phone number to send a video invite, and the patient will receive a text with a link to join the call.

You can also access Doximity from NM Interactive by visiting Applications > Doximity. NM has upgraded to Doximity Pro to ensure users have access to the latest Doximity Video features. For more information, see the **Doximity Dialer Video tip sheet** available on the Telehealth Resources page on **NMI** and **Physician Forum**.

GENETIC SEQUENCING OF SARS-COV-2

Characterizing the genetic sequence of SARS-CoV-2, the virus that causes COVID-19, is essential for understanding several facets of the pandemic. The viral sequence can reveal how the virus may be able to evade the immune system or reduce transmission from person to person. Comparing the genome sequences of viruses from within a region and around the world can also allow inference of the origins and tracking of the movements of different versions of the virus as the pandemic spreads and evolves.

A team of physicians and scientists led by infectious disease specialists Egon A. Ozer, MD, PhD, and Judd Hultquist, PhD, has performed genome sequencing of SARS-CoV-2 viruses collected from individuals with COVID-19 at Northwestern Memorial Hospital. To date, this group has analyzed the SARS-CoV-2 genomes from more than 170 patients in the Chicago area.

By examining variations in the viral sequences and comparing them to other sequences from around the world, Ramon Lorenzo-Redondo, PhD, has identified three distinct versions of the virus that were circulating in the Chicago area in March. In a **pre-review manuscript**, a group of NM scientists report that one prominent version of the virus was found in few places outside of Chicago, suggesting that this version of the virus may have been introduced to Chicago early in the pandemic. The other two versions were closely related to viral sequences from New York and Washington State.

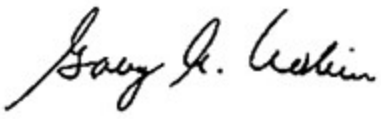
Chad Achenbach, MD, compared viral sequence characteristics of patient data and found no clear differences in severity of illness between the different strains. However, the scientists found patients infected with one type of virus had, on average, higher amounts of virus in their noses and throats compared to others. This could suggest that certain types of the virus are more likely to be transmitted from person to person than others. NM scientists will continue to examine this difference in further studies and leverage the power of viral genome sequencing to answer fundamental questions about COVID-19.

Ongoing studies are examining changes in the virus over the course of individual infections, analyzing the structure of viral proteins and investigating how they interact with host cells and the immune system.

Scientists are also measuring changes in lungs and immune systems of patients in response to different variants of the virus and evaluating how the viruses driving the pandemic evolve over time. These studies will be key to understanding the biology of the virus, and in designing preventive and treatment strategies.

Please remember, if members of the media reach out to you for comment or an interview, per **NM's Media Relations Policy**, please refer them to Media Relations at 312.926.7432.

Thank you to all NM physicians and clinicians for your ongoing support, collaboration and dedication to providing exceptional care during this unprecedented pandemic.



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